RESPONSE UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q88453

Application No.: 10/544,112

REMARKS

The present invention relates to a porous fiber comprising a hydrophilic solvent-soluble polymer and an organic compound having a plurality of hydroxyl groups, and having an average fiber diameter of 0.1 - $20\mu m$ and a void percentage of at least 5%, and a method for production thereof.

In the Office Action of August 31, 2007, claims 1-10 were rejected under 35 U.S.C. 102(b) based on US 2002/0192449 A1 (Hobbs).

The Office Action appears to take the position that the "organic compound having a plurality of hydroxyl groups" of claim 1 is equal to the "polyethylene glycol" in Hobbs.

Although polyethylene glycol is an organic compound and has a plurality of hydroxy groups, the molecular weight of polyethylene glycol is substantially different between Hobbs and the present invention. Hobbs is silent with respect to the molecular weight of polyethylene glycol for making microfibers, and according to Hobbs, polyethylene glycol therein serves as another polymer to be blended to polylactic acid. On the other hand, in the present invention, whereas polymers to be blended with polylactic acid, etc., are indicated as "polymers soluble in the hydrophobic solvent", polyethylene glycol is described separately as follows.

"Porous fibers and fiber structures of the present invention may contain one kind, or two or more kinds of <u>polymers</u> soluble in the hydrophobic solvent." (see page 7, lines 13-15)

and

"Porous fibers and fiber structures of the present invention contain an organic compound having a plurality of hydroxyl groups." (see page 7, lines 16-17)

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Namely, according to the present invention, polyethylene glycol used for making voids is not a "polymer".

In addition, the preferred embodiment and working examples of the present invention give further information as to molecular weight of polyethylene glycol, i.e., a preferable number-average molecular weight not less than 62 nor more than 300 (see page 7, lines 23-24), and a polyethylene glycol having average molecular weight of 200 could be successfully used (Example 4), but a polyethylene glycol having molecular weight of 400 or 600 could not be successfully used (see Co-Example 2 and Co-Example 3, respectively at page 18).

Although polyethylene glycol of molecular weight 300 may still in some sense be considered as within the broadest meaning of "polymer" in that it consists of multiple monomers, it is in the extremely lower range of "polymer" in the general meaning, and it should more appropriately be referred to as an "oligomer".

Since the practical meaning of polyethylene glycol is different between Hobbs and the presently claimed invention, it is respectfully submitted that Hobbs does not anticipate the present invention of claim 1 and the claims dependent thereon.

Polyethylene glycol having molecular weight of not more than 300 is necessary for creating voids when it is mixed with the hydrophobic solvent-soluble polymer and the mixture is spun by electrospinning. Although claim 1 does not provide a numerical limitation as to molecular weight of "an organic compound having a plurality of hydroxyl groups", it can easily be determined experimentally by an ordinary artisan.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby earnestly solicited.

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If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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